Traffic Calming

Traffic calming refers to a number of methods of slowing traffic and making room for pedestrians and bicycles. While traffic calming may be an effective way of balancing the transportation needs of pedestrians, bicyclists, and motorists, communities must ensure that traffic calming methods they adopt do not reduce safety, increase congestion, harm air quality, or reduce access by emergency vehicles.

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Background

The term "traffic calming" includes a variety of measures to slow motor vehicles and make room for bicycles and pedestrians. Originally, traffic-calming measures were designed to improve safety by reducing speed on neighborhood streets. More recently, however, calming devices have been proposed for some major commuting corridors to impede the flow of traffic, thereby encouraging motorists to choose other routes or other means of transportation. Traffic-calming devices include the following:

- *Speed bumps:* pavement bumps that are either narrow and abrupt or wider with a more gradual rise
- *Traffic circles on residential roads or rotaries on major corridors:* raised islands, often landscaped with ground cover and trees in the middle of an intersection
- *Chicanes, bends, or deviations:* curbs that extend alternately from opposite sides to form a serpentine path
- *Chokers:* various forms of narrowing the road at midblock or intersections usually by protruding sidewalks or sharp turns
- *Narrow roads:* significantly reduced lane widths, often including wider sidewalks that eliminate any road shoulder area
- *Directional barriers:* diverters that either force people to turn or prevent vehicles from entering certain streets

Traffic calming can slow vehicular traffic very effectively. Depending on the type of device and the road on which it is deployed, however, traffic calming can present significant safety hazards for motorists and bicyclists, delay emergency response vehicles, increase traffic congestion, reduce access for commercial vehicles, and increase air pollution.

The Myth

By forcing drivers to slow down, traffic-calming devices improve public safety and encourage motorists to consider other means of transportation.

The Facts

Improving access for pedestrians and bicyclists and better integrating streets into residential and commercial areas is an important challenge for regional planners. The traffic-calming strategies adopted by a region must be tailored to the unique transportation and aesthetic needs of a community.

When crafting appropriate traffic-calming strategies, care must be taken to not solve one problem and create another.

Traffic-calming devices that slow emergency response time should be of particular concern to communities. A study in Boulder, Colorado, found that speed bumps, for example, increased emergency response time by an average of 14 percent—a potentially fatal difference.

Some traffic-calming methods may also tend to punish the majority of responsible drivers rather than the handful who do not drive appropriately. In San Jose, California, city officials recently decided to eliminate the city's speed bumps, noting they would no longer penalize 95 percent of drivers for problems caused by the other 5 percent.

Much of the desire for traffic-calming strategies is based on a wish to make residential or smaller commercial streets safer, less congested, and more friendly for those who are not driving. But many traffic-calming strategies may actually have unintended consequences, such as increasing overall traffic congestion, both on

the affected streets and on other, larger streets, where traffic is diverted by the reduced capacity of streets with traffic-calming devices. This increased congestion results in increased emissions and degraded air quality in the region.

When crafting appropriate traffic-calming strategies, care must be taken to not solve one problem and create another. Traffic calming should not reduce emergency vehicle access, discourage access to commercial sites, or cause increased traffic congestion on other routes. It should contribute to increased safety for pedestrians, bicyclists, and motorists. Many of the goals of traffic calming can be achieved by ensuring that major roads are able to carry appropriate levels of traffic and minimizing the desirability of less appropriate routes. Appropriate traffic-calming measures that a community may wish to implement include the following:

- better synchronization of traffic signals, which has been found to reduce travel times by 30 percent
- raised sidewalks and separate bike paths
- strict enforcement of speed limits on all streets
- adequate traffic capacity on major roads
- medians to separate directional traffic

Our Position

Traffic calming may be an effective way of designing streets to balance the transportation needs of pedestrians, bicyclists, and motorists. To be effective, traffic calming should not reduce safety, increase congestion, harm air quality, or reduce access by emergency vehicles. Traffic-calming decisions are best made after conducting a comprehensive study on environmental, economic, and safety impacts.